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Submission to Inquiry into the health impacts of alcohol and other drugs in Australia

House Standing Committee on Health, Aged Care and Sport

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- I am happy to give evidence at a Public Hearing on request

Disclosure

- I have never received funding from e-cigarette or tobacco companies
- This submission has been prepared specifically for this inquiry and has not been published anywhere else
- Written on behalf of myself

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Executive Summary

- Smoking causes more deaths and disability-adjusted life-years (DALYs) than alcohol and all other drugs combined
- Smoking is concentrated in low-income and disadvantaged populations and is a leading cause of health and financial disparities
- High tobacco prices are causing financial stress for many low-income smokers and have created a thriving black market run by criminal networks
- Government-funded conventional treatments have low success rates
- Tobacco harm reduction involves substituting reduced-risk nicotine products for combustible cigarettes for smokers who are unable or unwilling to quit tobacco or nicotine
- Reduced-risk alternatives to smoking include vaping nicotine, heated tobacco products, nicotine pouches and Swedish snus
- THR is complementary to traditional abstinence-only methods and is indicated for smokers who are unable or unwilling to quit tobacco or nicotine
- THR is appealing to many disadvantaged groups with low quit rates and could help to reduce health disparities
- Vaping and other safer alternatives are considerably cheaper than smoking and can reduce financial disparities
- THR options are far cheaper than conventional treatments, involve no government funding and represent good value for money
- Smoking prevalence is declining more slowly in Australia than other Western countries which have embraced tobacco harm reduction
- The real-world application of THR has had dramatic effects on smoking rates and population health in many Western countries, including New Zealand, Sweden and Japan

Recommendations

- Make vaping available as an adult consumer product from licensed retail outlets with strict age verification
- Improve adult access to heated tobacco products, nicotine pouches, and Swedish snus
- Provide accurate information about safer alternatives to smoking and support and encourage their use for smokers who are otherwise unwilling or unable to quit
- Introduce risk-proportionate regulation and taxation
- Reduce the current tobacco tax substantially

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Introductory remarks

There is a sense in the community that smoking is no longer a priority public health concern. Nothing could be further from the truth. Smoking is the leading preventable cause of death and illness in Australia and globally and the leading risk factor in the national burden of disease.

A recent study quantified drug-attributable harms in the US in 2019. (Rees. JAMA 2024) Smoking was responsible for more deaths, disability-adjusted life-years (DALYs) and years of life lost due to premature death (YLL) than all other drugs and alcohol combined (including opiates, cocaine, amphetamine, hepatitis C, HIV etc).

Table. Disability-Adjusted Life-Years, Years of Life Lost, and Years Lived With a Disability for a Range of Substance-Attributable Harms: US, 2019[a]

Harm	DALYs	YLL	YLD	Deaths
Opioid-use disorders	4 776 381.42	2 286 801.97	2 489 579.46	47 336.67
Total burden related to hepatitis C	935 035.95	927 327.27	7708.68	34 610.95
Cocaine-use disorders	567 027.32	380 143.47	186 883.85	8322.79
"Other drug-use disorders"	434 953.80	253 958.03	180 995.77	5620.29
Amphetamine-use disorders	260 944.04	212 488.34	48 455.70	4437.00
Self-harm	159 153.44	156 395.91	2757.54	3007.67
Cannabis-use disorders	82 321.66	0	82 321.66	0
HIV/AIDS	35 726.00	24 946.15	10 779.85	566.53
Total burden related to hepatitis B	23 714.19	23 350.13	364.06	834.29
All drug-attributable causes	7 275 257.82	4 265 411.26	3 009 846.56	104 736.18
All alcohol-attributable causes	5 196 436.54	3 936 711.03	1 259 725.51	136 663.12
All tobacco-attributable causes	14 567 824.13	10 818 769.61	3 749 054.52	549 585.28

It goes without saying that any review of drug harms such as this one should have a special focus on tobacco smoking.

Smoking has been steadily falling in Australia, but in recent years the decline has been slower than in other Western nations such as New Zealand, the United Kingdom and Sweden. Modelling shows that Australia will not reach its smokefree target of 5% daily adult smoking by 2030 with the current strategies alone. (Levy 2022) In fact, it is expected to miss its target by a wide margin.

Further strategies are needed to complement the traditional abstinence-only approach. The strategy likely to have the most impact is tobacco harm reduction (THR). This involves switching smokers who are otherwise unable or unwilling to quit deadly cigarettes to safer, non-combustible nicotine alternatives such as vaping, nicotine pouches, heated tobacco products and Swedish snus. While not risk-free, these products carry only a small fraction of the risk of smoking. Because they are the most effective and most popular quitting aids, the public health impact is likely to be substantial.

This submission outlines the role of THR in more detail.

1. Assess whether current services across the alcohol and other drugs sector is delivering equity for all Australians, value for money, and the best outcomes for individuals, their families, and society

Health inequalities

Smoking is disproportionately concentrated in disadvantaged and marginalised populations and is the single largest driver of health inequalities. These populations include

- **Low socioeconomic groups**
- **People with mental illness**
- **Homeless people**
- **People who use drugs**
- **Indigenous people**
- **LGBTIQ populations**
- **Unemployed people**
- **Rural and remote smokers**

These groups have higher smoking rates, smoke more heavily and are more nicotine dependent. Smoking is normalised and is perceived as a way of coping with stress and provides some pleasure in difficult life circumstances. These populations have fewer resources and stress is a common cause of relapse. They are motivated to quit but have more difficulty quitting than other Australians with conventional treatments. [Hiscock 2013]

The smoking rate of Australians in the most disadvantaged quintile is more than three times that of Australians in the most advantaged quintile (13.4% vs 4.1%) (NDSHS 2022-23). The high smoking rate is reflected in a high rate of smoking-related mortality and morbidity. Smoking is responsible for half the life expectancy gap between the most disadvantaged and most advantaged quintiles. [Jha Lancet 2006]

The Australian Cancer Atlas shows a strong social gradient. Cancer rates are greatest in the lowest socio-economic areas. [Aust Cancer Atlas]. A recent study found that poor, middle-aged Australians are more likely to die from cancer than other Australians and the gap is widening. (Atalay 2023)

Middle-aged men living in the poorest areas of Australia are twice as likely to die from cancer than those living in the richest areas. Women in the same areas were 1.6 times more likely.

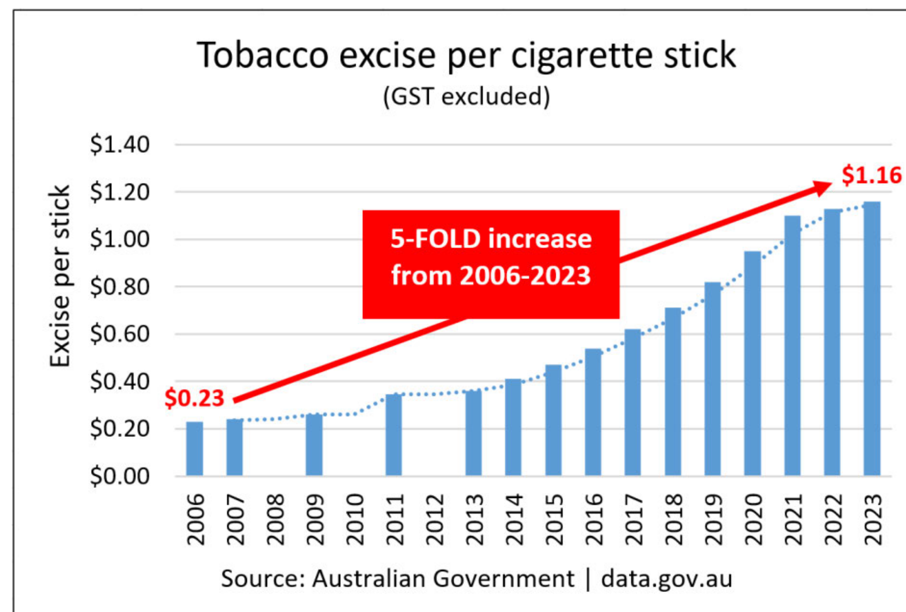
Indigenous Australians smoke at more than twice the rate of the general population (20% vs 8.3% daily smoking in 2022-23). [NDSHS 2022-23] Smoking is responsible for 11.9% of the Indigenous burden of disease and is the leading risk factor. Tobacco contributes to 20% of the gap in the total disease burden between Indigenous and non-Indigenous people. (Burden of Disease. ATSI 2018]

People living with mental illness have high smoking rates – up to 80% for serious mental illness and substance use. Smoking is the leading cause of the health gap between those with or without a mental health condition and vaping is supported as a harm reduction tool by the Royal Australian and New Zealand College of Psychiatrists. (RANZCP 2023)

Financial inequalities

Smoking is a leading cause of financial inequalities.

Australia has the highest cigarette prices in the world (Numbeo) and the cost has risen exponentially since 2010. The tobacco excise has increased 5-fold over the last 15 years, more than any other consumer product.



High prices have put legal products out of the reach of many low-income smokers. This has created a thriving black market for smuggled tobacco run by criminal gangs, which is estimated to be up to 35% of the total tobacco market. This has also resulted in the loss of substantial government revenue.

Tobacco taxes are regressive and create substantial financial stress for low-income smokers, many of whom are heavily addicted and unable to quit. At these prices, the law of diminishing returns means that further increases are causing more harm, while having limited impact on smoking rates. This contributes to poverty and leaves less money for other essential needs like food, housing, healthcare, and education. (Guillaumier A. 2015) This is especially problematic during a cost of living crisis.

The role of vaping nicotine

These populations respond less well to traditional abstinence-only strategies and other approaches are needed. Vaping and other forms of THR may be especially useful. (Thirlway 2018; Gartner 2016). "Electronic cigarettes may represent a powerful harm reduction tool amongst subpopulations traditionally left behind in conventional smoking cessation movements". (Vuong 2023)

Australian research has shown that vaping nicotine is an appealing option for disadvantaged smokers [Bonevski 2017] and research suggests that vaping may help to reduce inequalities in smoking. (Kock 2020 and Hardie 2023)

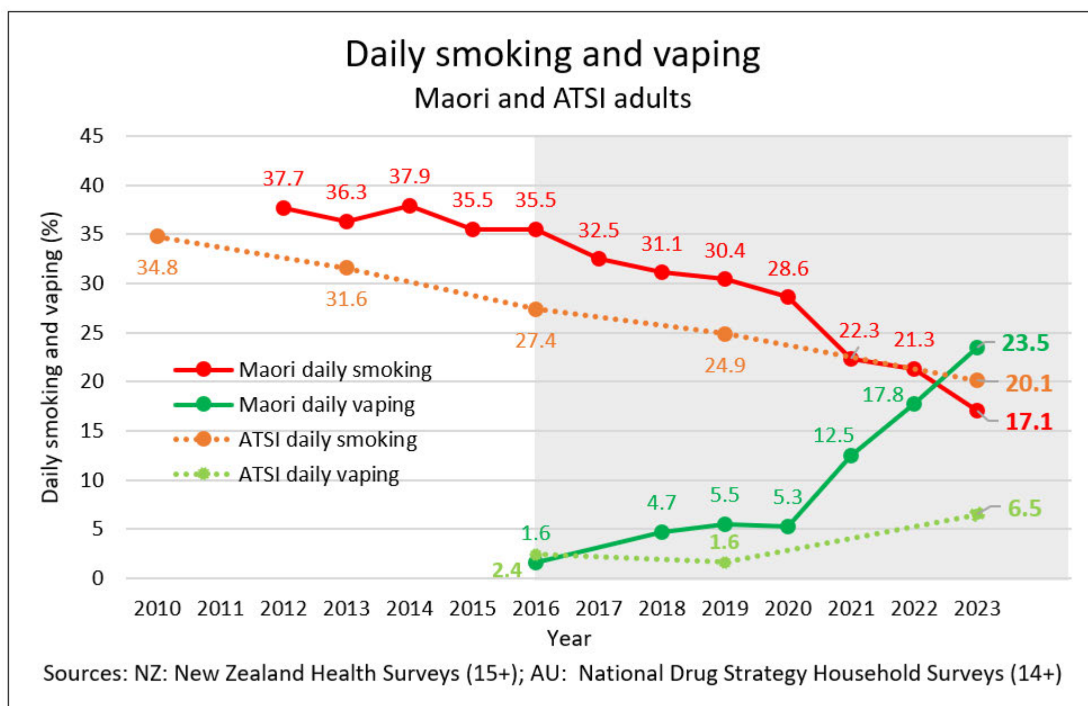
Vaping nicotine is now recognised as the most effective quitting aid (Cochrane Review 2023) and is the most popular quitting aid in Australia (NDSHS 2022-23). Vaping is not risk-free but has only a small fraction of the risk of smoking (OHID, England). It is approved by the RACGP as a short-term quitting aid or as a long-term safer substitute for smoking. (RACGP guidelines)

Vaping is also supported by the Royal Australian and New Zealand College of Psychiatrists as a harm reduction option for people with mental illness. (RANZCP 2023) In Australia, vaping has been especially popular for people with more severe psychological distress. (NDSHS 2022-23)

A recent study in the US of 18,000 smokers who switched to vaping found that quit rates (and reduced smoking for those who could not quit) were largely comparable across socio-economic groups, those with mental health conditions and minority groups. (Kim 2024) Vaping has also led to a substantial reduction in smoking in low socio-economic groups in New Zealand. (see below)

Smokers with mental illness who switch to vaping may continue to benefit from the positive effects of nicotine, such as reduced anxiety and relief of depression and improved cognitive function. (Sharma 2017) Nicotine modestly improves attention, working memory and sensory gating which are specifically impaired in schizophrenia. Vaping can help to alleviate boredom and can facilitate socialising in people with severe mental illness (SMI). Nicotine may counter some of the negative symptoms of SMI such as amotivation, withdrawal and blunted affect and may also help to ameliorate the sedation and weight gain from antipsychotic drugs. (Sharma 2017) It can also improve ADHD and Parkinsons disease

Vaping could be beneficial for Indigenous smokers for whom smoking rates have declined very slowly. From 2016-2023 Indigenous daily smoking declined 36% to 20.1% adult smoking. However, in New Zealand, Māori smoking declined 52% during the same period to 17.1% as a result of a much higher uptake of vaping (23.5% daily vaping). (NZ Health Survey) Indigenous Australians have high acceptance of vaping and have higher rates of vaping than the general population (6.5% vs 3.5%). (NDSHS 2022-23)



However, vaping is essentially prohibited in Australia and is especially difficult to access for disadvantaged groups. The prescription-only model failed and the pharmacy model will also be unworkable. (see here for details)

Vaping is substantially cheaper than smoking in Australia and can lead to large financial savings. The average cost of smoking in Australia is $10,700 per year (13 cigarettes per day; a 20-pack of the

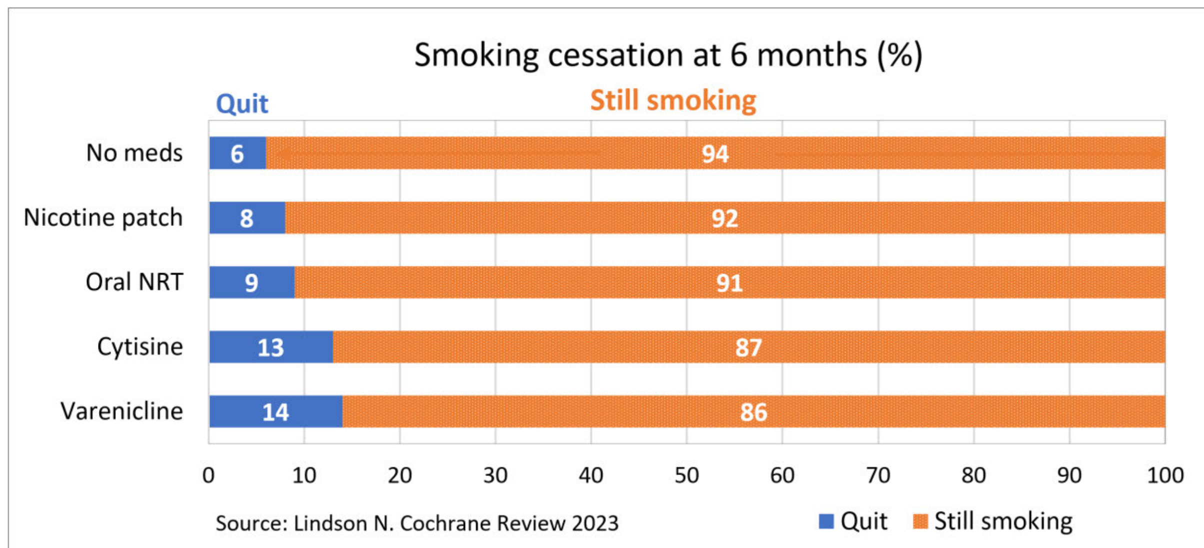
leading brand costs $45). Vaping costs $500-2,000 per year depending on the type of device used, a saving of over $8,000 per year on current prices. (see here for more)

Other benefits of vaping in these populations included reduced secondhand smoke exposure, reduced role modelling of smoking by parents, improved family budgets and reduced generational transfer of smoking behaviour.

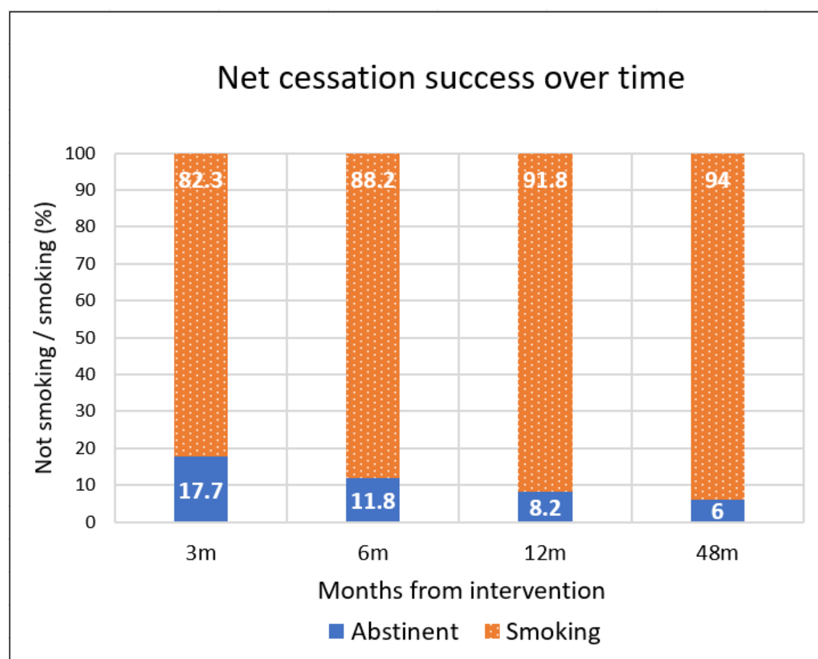
The need for affordable tobacco has also created a thriving and violent black market to supply these customers. Making vapes less costly, more appealing and readily available to adult smokers would reduce the need to purchase illicit tobacco.

Value for money

Conventional treatments are publicly funded and have low long-term success (quit) rates. They are delivering poor outcomes and are poor value for money. In randomised controlled trials, pharmacotherapies for smoking cessation achieve quit rates at 6 months of 8-14%. (Cochrane review 2023)



Success rates diminish further with time and only 6% of subjects in RCTs are abstinent at 4 years due to high relapse rates. (Rosen 2018)



Quit rates are even lower in real world studies. (eg Kotz 2014) Public costs include medical consultations and government funding of medication as well as the costs of smoking-related medical care due to delays in cessation of smoking.

In comparison, vaping products are fully paid for by the user and involve no public expenditure. They have higher quit rates than most conventional treatments, are more popular and represent high value for money.

Recommendations

- Vaping to be made available as an adult consumer product from licensed retail outlets with strict age verification. Regulation and taxation should be proportionate to risk. This will make it more accessible to adult smokers and will restrict access for young people. The black market will diminish as a result.
- Government support and education about vaping, as in New Zealand
- Tobacco excise. There should be no further tobacco excise increases for at least 5 years. Ideally, tobacco excise should be reduced

2. Draw on domestic and international policy experiences and best practice, where appropriate.

The real-world application of tobacco harm reduction has had dramatic effects on smoking rates and population health in several jurisdictions.

Tobacco Harm Reduction is a strategy to reduce the harm for smokers who are unable or unwilling to quit. It involves replacing high-risk combustible tobacco products such as cigarettes with lower-risk, non-combustible nicotine alternatives. THR is a complementary tobacco control strategy to abstinence-only strategies. They include

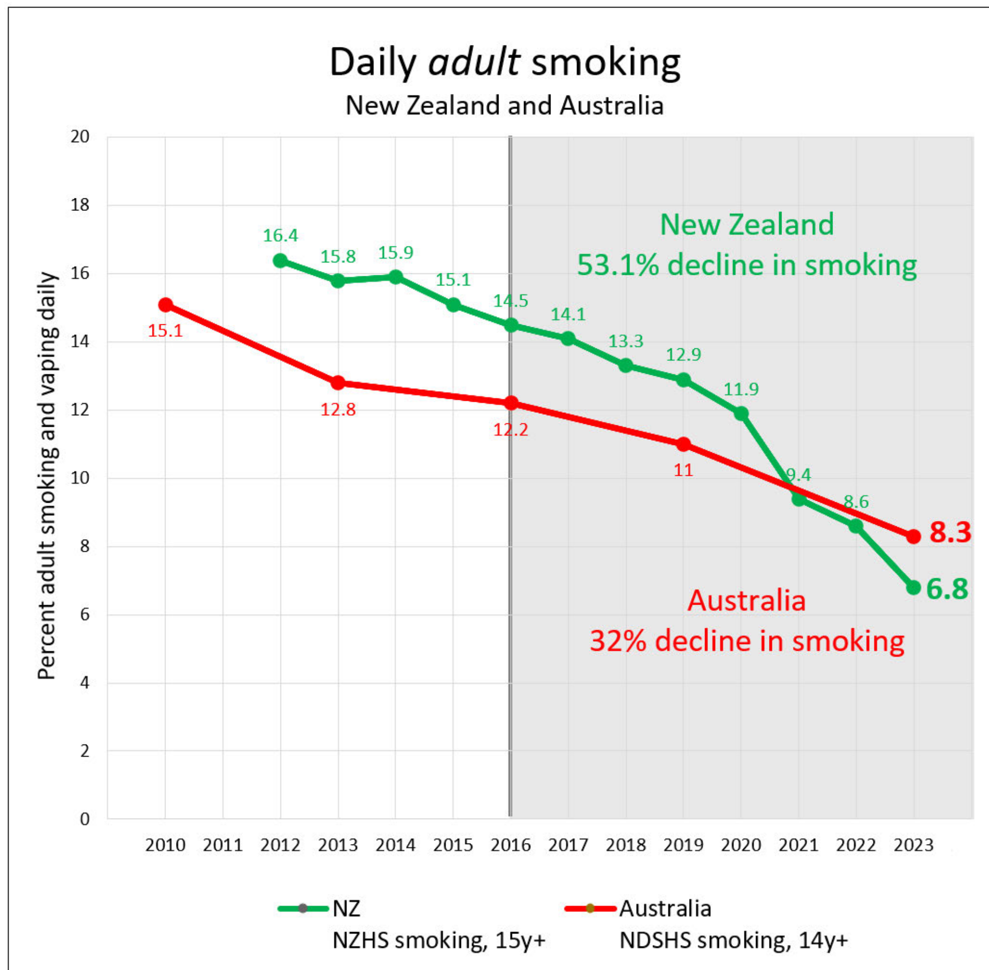
- Nicotine vaping
- Nicotine pouches
- Heated tobacco products (HTPs)
- Swedish snus

1 New Zealand

New Zealand and Australia both have comprehensive tobacco control policies and similar demographics, social characteristics, quality of life and health outcomes.

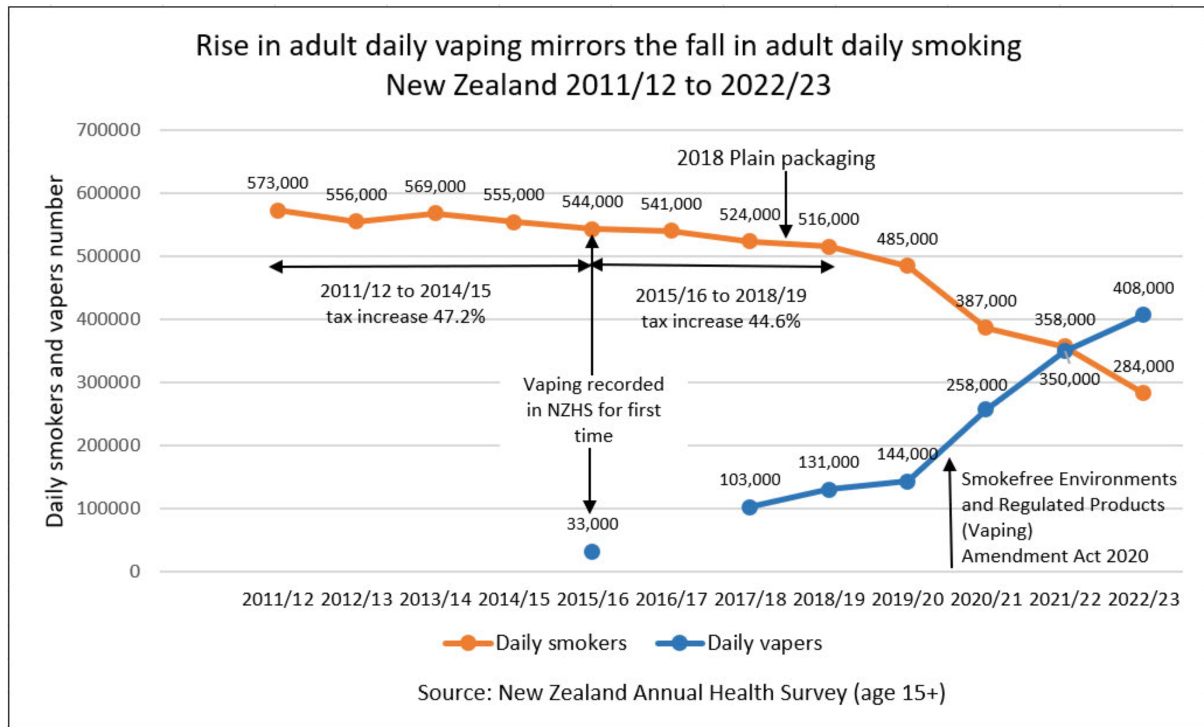
However, New Zealand has a more liberal approach to vaping nicotine. Vaping has been widely available but unregulated since 2016. In 2020, New Zealand legalised and regulated nicotine vaping products as an adult consumer product. The Ministry of Health endorsed and encouraged vaping as a smoking cessation aid.

From 2016-2023, adult daily smoking declined by 53% in New Zealand, mirroring a rise in daily vaping to 9.7%. In comparison, smoking declined by only 32% in Australia during the same period, as vaping increased to 3.5%.

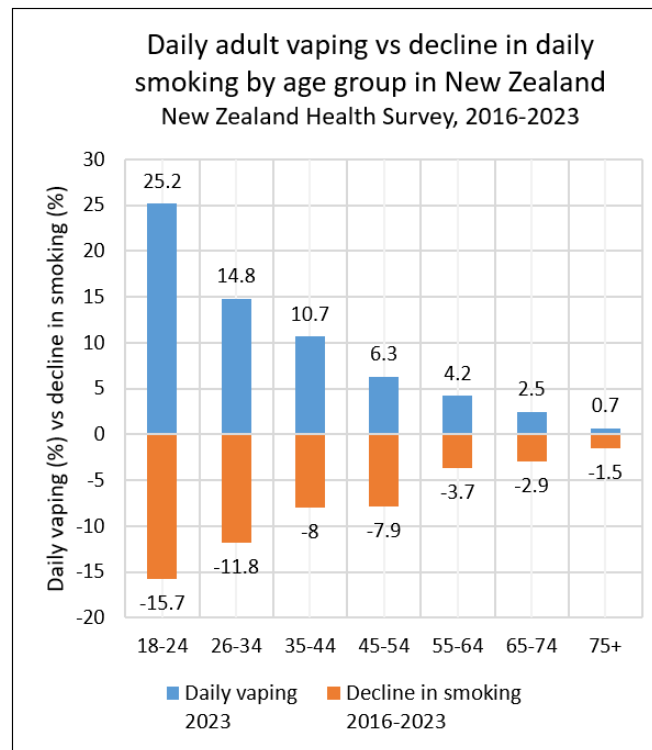


Smoking rates are now lower in New Zealand than in Australia and vaping has been a major contributor to this rapid decline. The adult daily smoking rate is now 6.8% in New Zealand and 8.3% in Australia. New Zealand is now on track to reach its Smokefree Target in 2025.

The rise in vaping in New Zealand mirrors the fall in the number of smokers.



Smoking has declined fastest in the age groups with the highest vaping rates.

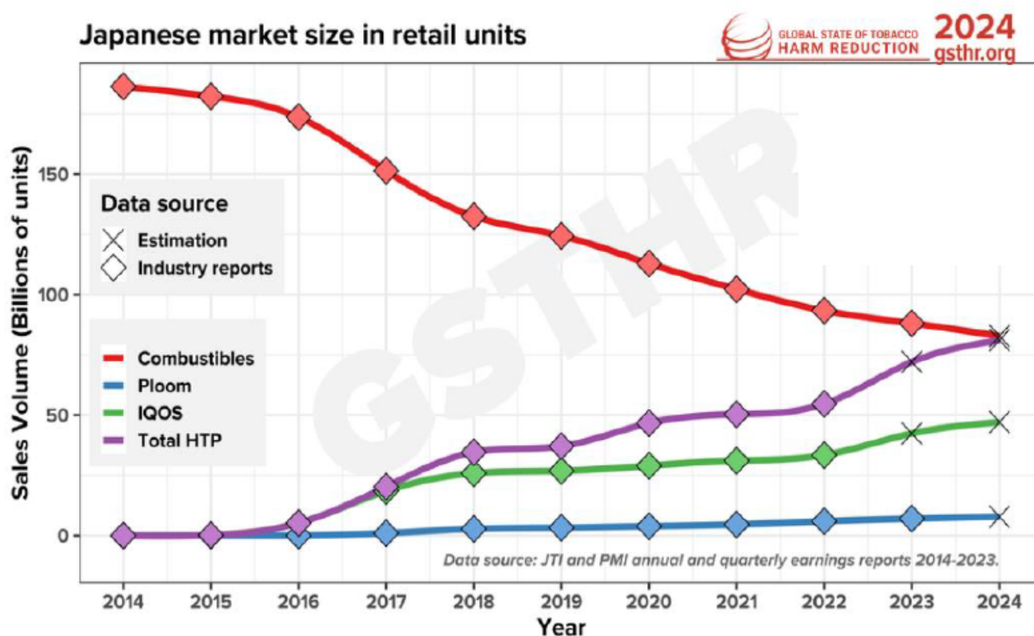


The decline in smoking in New Zealand was particularly notable in the lowest socio-economic quintile where smoking rates dropped by 59% from 26.2% in 2016 to 10.7% in 2023 (8.4% per year). The decline in smoking in Australia's lowest socio-economic quintile was 24% from 17.7% in 2016 to 13.4% in 2023 (3.5% per year). This is further evidence that vaping could help to reduce disparities.

2 Japan

Heated tobacco products were introduced in Japan in 2016. HTPs are reduced-risk alternatives to cigarettes. They are electronic devices that heat a stick of processed tobacco without combustion or smoke, releasing nicotine and flavours. An independent review of 17 studies found that HTP aerosols contain far fewer chemicals and expose users to significantly lower levels of toxic compounds than smoke. (Sussman 2023) One brand, IQOS is authorised as a modified risk product by the US FDA which means "the product will or is expected to benefit the health of the population as a whole"

Since 2016, the sale of cigarettes in Japan has declined **by an unprecedented 60%.** (JT Q1 2024). HTPs are now estimated to be 42.2% of the total tobacco market.



Data Source: JTI and PMI annual and quarterly earnings reports 2014-2023

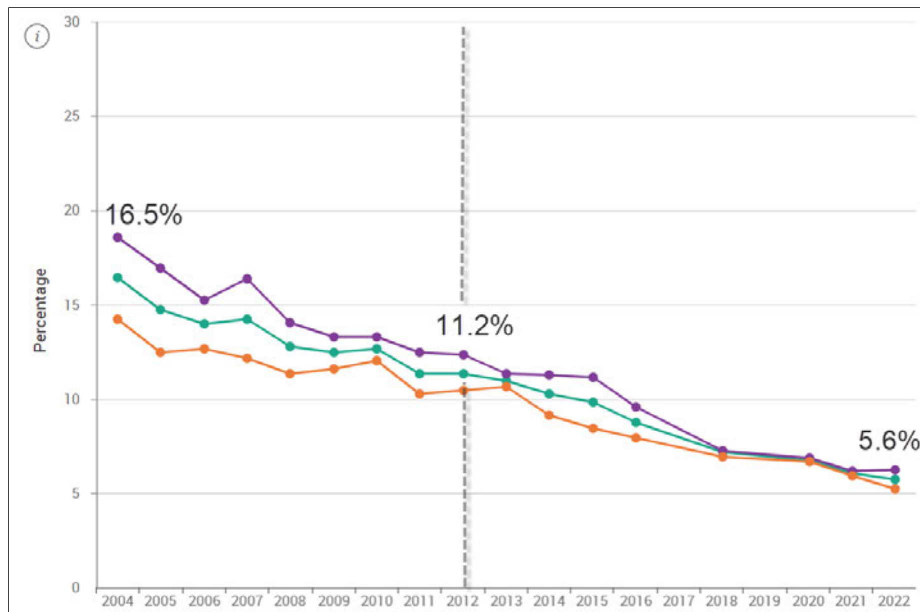
In Australia, HTPs are essentially banned. They cannot be sold in Australia. They can be imported, but there is a complex and expensive procedure which, to my knowledge, is not used.

3 Sweden (and Norway)

Sweden has embraced tobacco harm reduction for many decades. Swedish snus has been available for hundreds of years. Snus is moist, pasteurised tobacco in a pouch placed under the upper lip. It delivers nicotine and is the most popular and most effective quitting aid in Sweden. It is a very low-risk product and associated with a significant reduction in cancer, heart disease and stroke and all-cause mortality. (Lee 2011; Clarke 2019) Snus is banned in the other EU countries.

Sweden also allows HTPs, nicotine pouches since 2018 and nicotine vaping since 2015.

The adult daily smoking rate in Sweden fell by 50% in 10 years from 2012-2022 and was 5.6% in 2022, compared to the EU average of 23%. Sweden is on target be smoke-free in the next year.



Source: Public Health Agency, Sweden

As a result of the low smoking rate there have been dramatic improvements in public health (The Swedish Experience)

- Lung cancer mortality is less than half EU average
- Tobacco-related death rate (male) 39.6% lower than EU average
- Cancer incidence 41% lower than EU average

According to the Snus Commission in 2017, (Snus Commission)

> "If other EU countries practised the same tobacco consumption patterns as Sweden – encouraging smokers to switch from cigarettes to snus – **355,000 lives per year** could have been saved, most of them men over the age of 30"

Norway is also seeing remarkable success since snus became available, with high uptake and an accelerated decline in smoking prevalence. (Lund 2014)

Conclusion

The easy availability of reduced-risk, non-combustible nicotine products (nicotine vapes, HTPs, nicotine pouches and snus) has resulted in a rapid decline in smoking in New Zealand, Japan, Sweden and Norway. Smokers who are unable or unwilling to quit have transferred to safer alternatives, with substantial public health improvement.

In particular, the high uptake of vaping by low socio-economic groups in New Zealand has helped to lessen disparities.

Recommendations

Heated tobacco products, nicotine pouches and Swedish snus should be made available as adult consumer products sold with strict age verification from licensed outlets, as for nicotine vaping products.